

The Danish fertilizer registry & accounting system

- Which components and how does it work

Seminar on environmental knowledge transfer in agriculture Tampere - Finland 27th October 2022 Thorm Witt Bendtsen

A brief historical perspective

The Aquatic Environment Action Plan I (1987)

- Reduction of nitrogen loss from manure (storage capacity)
- Increased demands to utilisation of nitrogen in manure
- Areas with winter-green crops
- Max. addition of nitrogen at farm level
- → Implemented fertilizer accounts in early 1990's.

The Aquatic Environment Action Plan II (1998)

- Stricter rules regarding max. N addition
- Catch crops etc.

The Aquatic Environment Action Plan III (2004)

EU directives, such as the Nitrates Directive, the Water Framework Directive and the Habitats Directive, have over time replaced and/or amended these national plans.



Fertilizer accounts - Who is affected by the rules?

Farmers are obligated to be part of the Register for Fertilizer Accounts, if they have an agricultural-related company and live up to at least one of the following criteria:

- The company annually produces or receives livestock manure, processed livestock manure, biomass digestate or other organic fertilizer with a total Nitrogen content that exceeds 1.000 kg N
- 2. The company **annually produces or receives** livestock manure, processed livestock manure, biomass digestate or other organic fertilizer with **a total Nitrogen content that exceeds 100 kg N/ha** crops
- 3. The company disposes of **an area that exceeds 10 hectares with crops** that have a nitrogen or phosphorus fertilization quota (of > 0 kg N or P per ha).
- → All farms, which potentially could affect the environment, are encompassed by the system.

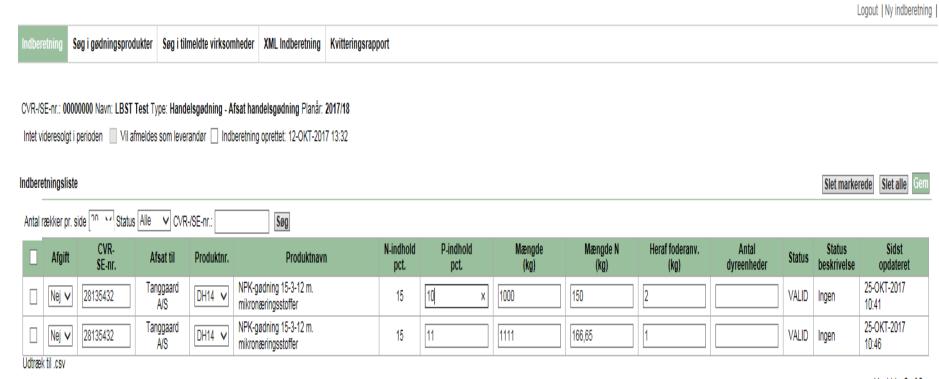
Elements in the Danish fertilizer regulation:

- Agricultural companies with a certain level of activity must register in the Register of Fertiliser Accounts and submit a fertilizer account every year
- All suppliers of fertilizers must report amounts supplied all types of fertilizers are included
- Nitrogen-quota calculated yearly for each farm
- Utilization of nitrogen in manure is calculated
- Levy on use of commercial fertiliser by companies not part of the Register of Fertilizer Accounts (0,67 €/kg N)
- Requirements for catch crops in the autumn
- Phosphorus amounts (all fertilizer types) used at farm level



IT-module 1

Suppliers of fertilizer

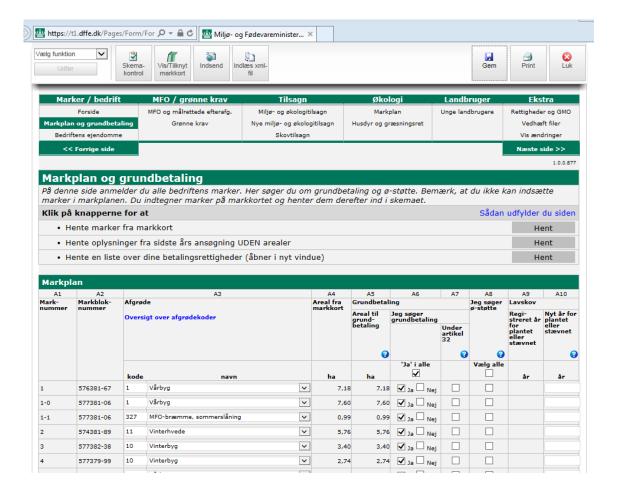


række(r)1 - 2 af 2

Tilføj række

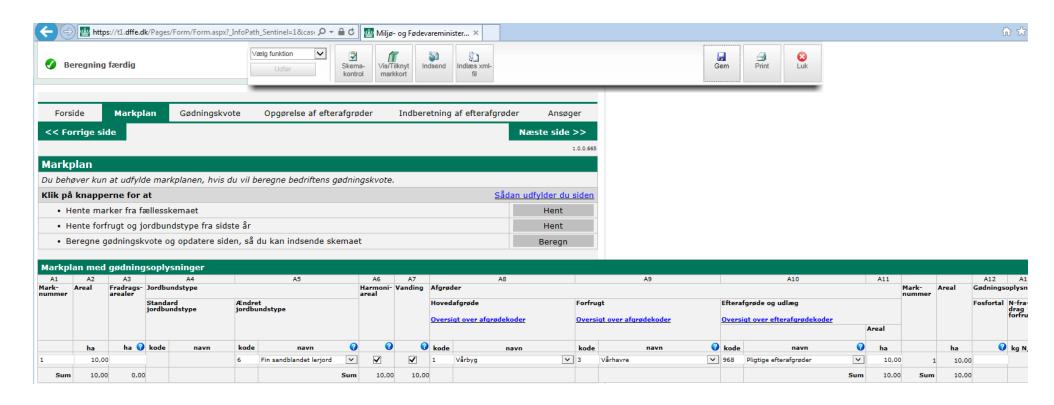
IT-module 2

Common Application system for CAP area support



IT-module 3

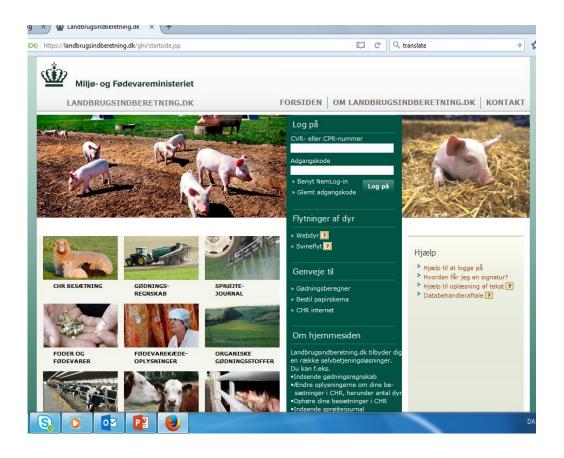
Nitrogen quota Phosphorus - requirements Catch crops outlayed



IT-module 4

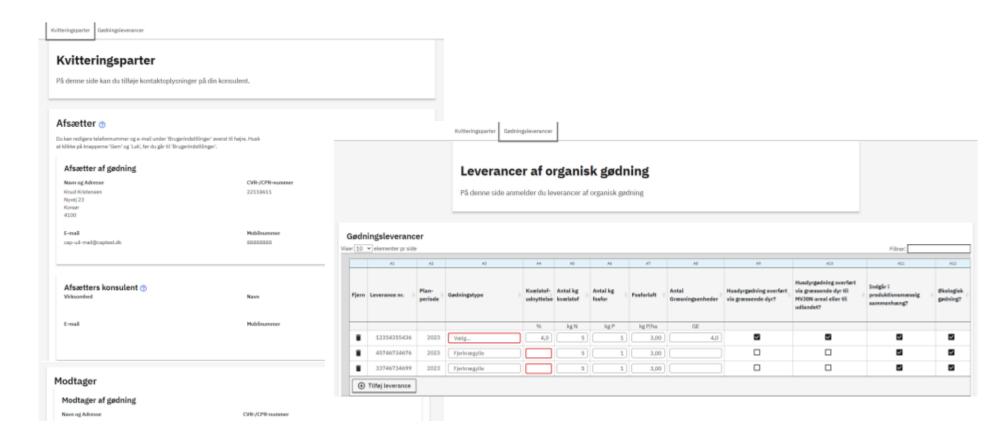
Central Registry of Domestic Animals

Type and number of animals on all locations



IT-module 5

Manure distributed among farmers

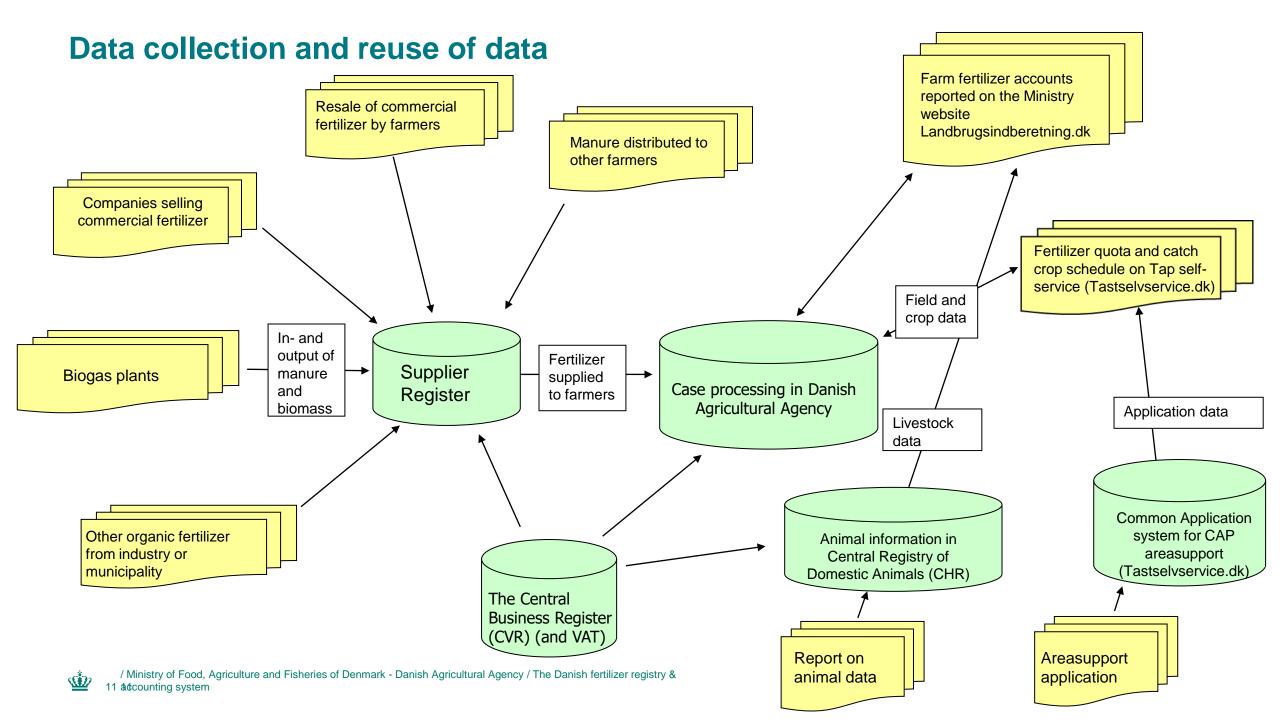


IT-module 6

Fertilizer account



- 86% of farmers use advisory service
- Reporting to authorities use of upload by xml-files



Important lessons

- Reuse of data is essential
- Regulation is backed up by other regulation
- Important tool for awareness-building for farmers & consultants

Important lessons

- Constant maintenance & further development of registry & accounting system
- Complicated system
- Strenghtened physical control is needed
- Tax on CO2 is probably coming



Thank you for your attention!

Questions are welcome...